DATASHEET
Taoglas EDGE™ IG10
Industrial Gateway

The **Taoglas EDGE™ IG10** is a compact plug-and-play multi-sensor gateway with cellular and Bluetooth connectivity, providing ultra-low power consumption in a small form factor. It features an ARM M7 processor, optimized firmware/OS RTOS, validated applications libraries (Real-Time Performance), and comes with an advanced onboard analytics engine. The Taoglas EDGE IG10 offers the ultimate degree of flexibility and scalability while saving costs and time to market for OEMs and enterprises looking to deploy industial IoT applications. Developed by industry experts and with proven commercial solutions across healthcare, industrial, transportation, agriculture, and smart city applications, you can be up and running with the Taoglas EDGE IG10 pre certified gateway in minutes.

The IoT design process is literally as simple as activating a SIM card. The solution is supported by Taoglas Insights™ – a cloud management platform – which provides a scalable end-to-end solution for easy control and management of connected devices.

Key Features

- Cost-effective end-to-end Industrial Gateway with cellular 4G, GNSS, Bluetooth, and on-board movement sensors
- Industrial communication protocols
- Integrated digital and analog I/Os
- Industrial grade connectors
- Low power consumption
- Highly secure architecture
- Integration to Taoglas Insights platform
- Small Form Factor
- Ultra-low power consumption
- Plug-and-play with fast-time-to value for a variety of industrial IoT applications
- Device, data, SIM, and sensor management via Taoglas Insights™ platform
- Secure provisioning and certificate management
- Over The Air (OTA) firmware updates and device diagnostics
- Deployment lifecycle control
- Easy 3rd party integration with AI and ML applications
- Pre-certified with Tier-1 mobile carriers

4G Cat 1
3G
2G
NB-IoT
LTE CatM

GPS
GLONASS
Galileo
BeiDou

BLE5
BLE4.2

BLE

Energy Monitoring Control | **Industrial Chillers** | **Predictive Maintenance** | **Industrial Boilers** | **Intelligent Renewables Monitoring** | **Building Management Systems** | **Network Hub for Smart Cities** | **Industrial Generators**

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Pinout description and functions

Allows powering of external devices with voltage that comes in on **Power Input+**

Analog Input - Gateway has 12 bit ADC and converts as follows 0V -> 0 decimal, 36V -> 4095 decimal

Optically isolated digital outputs, requires a power supply connected to the **Power Input for Isolated Digital Outputs**

Pinout Description

■	Power Input +(9V - 27V DC)
■	Power Input - (GND)
■	3.3V DC Output (Max 1A)
■	GND
■	GND
■	Switched Power Output (9V - 27V DC)
■	RS485 -
■	RS485 +
■	GND
■	CAN Low
■	CAN High
■	Serial TX (UART 3.3V)
■	Serial RX (UART 3.3V)
■	GND
■	Analog Input (0V - 36V)
■	Analog Input (0V - 36V)
■	Digital Input (Isolated 7.5V -27V DC)
■	Digital Output 3 (Isolated)
■	Digital Input (Isolated 7.5V -27V DC)
■	Digital Input (Isolated 7.5V -27V DC)
■	GND Isolated Inputs
■	Digital Output 2 (Isolated)
■	Digital Output 1 (Isolated)
■	Ground for Isolated Digital Outputs
■	Power Input for Isolated Digital Outputs

Connections Capabilities

- RS485/Modbus RTU
- CAN bus
- UART
- Analog Inputs
- Multiple Digital Inputs/Outputs

4G Cat-1
3G
2G
NB-IoT
LTE Cat-M

GPS
GLONASS
Galileo
BeiDou

BLE4.2
BEACONS
ANDROID
IOS

PRODUCT SPECIFICATIONS

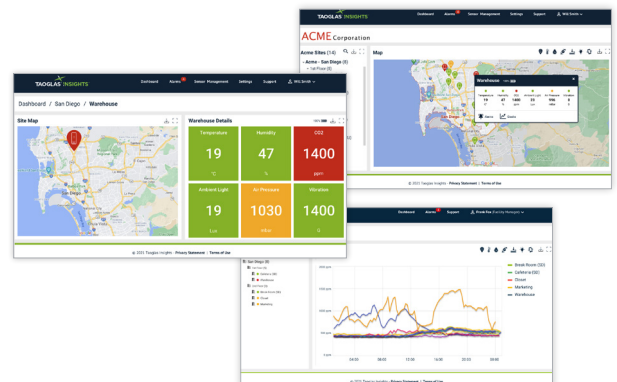|		
System	Firmware/OS	RTOS + Applications Libraries (Real Time Performance)
	Security	Cloud Mutual authentication Hardware root of trust Secure key storage
Radios	Cellular Modems	2G, 3G, 4G, NB-IoT, Cat-1 LTE EMEA with 2G fallback Global NB-IoT and Cat-M
	GNSS	GPS/GLONASS/Galileo/BeiDou (use external antenna)
	Bluetooth	BLE 4.2
Physical	Operating temperature	-20°C (-4F) to +55°C (131F)
	Mounting	DIN Rail
	Dimensions	125.2 x 89.6 x 41.5mm
	Power	9V to 27V
	Current	1A
Antennas (Optional)		Taoglas MA114 external permanent mount antenna, multiband cellular and GNSS (4G/3G/2G - GPS/GLONASS/Galileo)
Taoglas Insights and data plan		Taoglas Insights subscription and cellular data plan is available

Taoglas Insights™
Real-time analytics

Taoglas Insights™ is your cloud-based software platform that allows for flexible, reliable and efficient gathering of data and life cycle management of EDGE devices from one dashboard.

- Device management
- Sensor management
- Security management
- Connectivity management
- Application platform

It enables real-time insights and intelligence that drive optimization, cost savings, compliance and new revenue opportunities for our enterprise customers.

Taoglas Insights™ provides everything to securely connect and manage your sensors, machines and devices remotely, removing complexity and allowing your organization to focus on today's business applications.

For further details visit:
https://www.taoglas.com/product/edge-ig10-industrial-gateway/

taoglas.com